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AUTHOR Taweeset, Lanna
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ABSTRACT

A brief essay on the need for diversification and training of the library and information services workforce in developing nations introduces this guide to UNESCO publications, international conference papers, research reviews, and articles that examine these issues. It is suggested that workforce management is particularly important in the library/information services sector because it is labor intensive and calls for staff who have a high level of information and training. Definitions of key terms are also provided, as well as a discussion of continuing education, library education, and education abroad. The resource guide, which makes up the major part of this report, lists 51 selected sources covering: (1) background information on economics and education in developing countries; (2) the impact of information used in developing countries; (3) some problems encountered in these countries, such as lack of appropriate staff in information systems, and technology transfer; (4) guidelines for workshops, training sessions, and seminars for professionals; (5) curriculum innovations in library and information science; and (6) new roles for information professionals. Many of the individual items are annotated. (EW)

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DIVERSIFICATION OF THE WORKFORCE IN INFORMATION PROFESSIONALS IN DEVELOPING COUNTRIES

A Selective Resource Guide

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Lanna Taweeset

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Secretariat
Education and Training Committee
International Federation for Information and Documentation
School of Information Studies
Syracuse University
200 Huntington Hall
Syracuse, NY 13244-2340
(315) 423-4930

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DIVERSIFICATION OF THE WORKFORCE IN INFORMATION PROFESSIONALS IN DEVELOPING COUNTRIES

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PROF. MARTA L. DOSA

LANNA TAWEESET

Diversification of the Workforce in Information Professionals in Developing Countries; a study of a new roles in formation work which are emerging in developing countries

Introduction

> "People are the world's most valuable asset. Sucessful development depends, more than anything else, on having the right number of skilled people available at the right time. Without such people it is impossible to obtain the full benit from the other sources which are available to us. If we can improve our ability to manage the development of the workforce then we will automatically increase the benefits we gain from more material resources." (1)

This is particularly true in the case of libraries and information services which are labour-intensive and which call for staff who have a high level of education and training. As Carlos Penna , Douglas Foskett and Phillip Sewell have noted in their book on planning:

> "Of all the problems facing the library and information services planner, more particularly in developing country, that of trainned staff is the most critical because the time lag between the identificatioion of the need and its satisfaction is the longest " (2)

We therfore need to develop forecasting and planning techiques to the help of improving the utillisation of the workforce. Certaint steps have been taken to do this in developed countries, notably Australia, the United Kingdom, and the USA.

It is, however, in developing countries that the need is most acute. Librarians and information workers in developing countries are faced with some particularly intractable problems. Most significant, will be the general shortage of skilled labour.

The overall aim of workforce management is to improve position. It does, however, enable the workforce manager to

indentify shortages and surpluses and to indentify areas where staff are being used less than effectively. On the basis of this information and the plans for future development, it is possible to calculate future recruitment and training levels. It should aslo be possible to indentify the areas where training is most needed.

It is not enough to plan the development of the library and information workforce in isolation. For such planning to be fully effective it must be intregrated with national planning systems and must take account of , and incorporate, growth targets which form the basis for such national plans. In particular the library and information workfoce planner must take full account to the eider educational planning process.

This was one of the views put forward at the IFLA meeting on the national and international library planning held in 1974:

> "In conclusion, there is a need for more realistic planning for individual countries. The state of development varies and the problems and priorities are not similar. Manpower planning for library personnel should be considered part of national planning...a national library commission is necessary to prepare on overall national plan from which manpower projections canbe made." (3)

The workforce planning system should be administered, or at least coordinated, by a body with some national standing. It might be a professional association by a body with some national standing. It might be a professional association , a national library, archives or information service or branch of government. Such backing is necessary to secure the cooperation of the

individual services which will be called upon to provide information.

While the technique has been designed to be simple, it does require certain skill if it is to be applied sucessfully. The person actually undertaking the work should have an understanding of the overall structure of the library, archive and information service and an appreciation to the current workforce situation. They should also have an organised and systematic approach to the task. It is not necessary to have high-level statistical skills, although at certain points it may be necessary to consult a statistician.

The important of the workforce

Library, archive and information services are labour-intensive. To be effective, they require adequate numbers of relatively highly trained staff. It is not surprising, therefore, that expenditure of staff nearly always forms the largest item in the budget.

Because of the labour-intensive nature of the services, shortages of staff seriously reduce the efficiency and effectiveness of the service. Without sufficient staff work cannot be carried out. Staff responsible for the direct provision of services to users cannot operate effectively without proper support staff. Equally, there is little point in having good support services if staff are not available to deliver services to users.

In the short-term it is possible to overcome a shortage of trained staff by employing workers who do not have the required training or education. Such workers cannot, however, be expected to deliver the same quality of service that could be obtained from an appropriately trained worker.

It is important, therefore, to avoid shortage of staff. It is equally important to avoid producing surplus. To educate and to train individuals for whom there is no prospect of employment is a waste of human resources. Furthermore, any such surplus will reduce the scacity value of the workforce and can adversely depress salary level. So, for the effective development of the workforce as a whole, it is vitally necessary to ensure that the right numbers of appropriately trained staff are available.

It is also important to ensure that there is an appropriate balance or akills and expertise. The library, archive and information system as a whole will call for a considerable range of different skills and specilisms. there will, for example, be a demand for people possing management skills or administrative ability. There will also be a need for people who are skilled in specialist, or the acquisition of materials. The successful exercise of these skills calls for the appropriate training and re-training facilities.

The overall effciency of the system is determined by the availability of the right number of trained staff and the range of skills and attributes which they possess. (4)

To clearify the understanding about careers in information systems, I would like to present some key terms definitions as follow:

Information Professional

"This is the broad term refers to all professionally trained people who are working in the field, regardless of where they work or what they do."(5)

Information Specialist

"This broad category of information professionals includes people who are not generally working in traditional library settings, although they may very well be using library skills in their work. They are primarily processing information using new technoligies, and they are more concerned with the transfer, analysis and use of information than with the storage and protection of collections. Information analysts, information researchers, information managers would all come under this heading." (5)

Information Scientist

"Information scientist has a narrower meaning than one sometimes encounters elsewhere. Here it is confined to someone concerned with the nature of information itself, studying how information is generated and transfered from one source or format to another, how people preceive of and use information. Information scientists are interested in research and sometimes teaching. They work in colleges and universities or for companies such as IBM, Wang or Instutute for Scientific Information, which maintain research programs to develop new systems. Job of this type usually require a doctoral degree in library/information science or a related disciplin." (5)

Librarian

"Librarian refers to a specific sub-type of information professional who works in a library and performs primarily library-related tasks." (5)

Professional Staff

> "Professional staff are staff who have a qualification in librarianship or information work. The qualification will normally have been obtained as a serult of education at post graduate or undergraduate level. Professional staff will be responsible for administrative work such as budgeting, staff, planning, organisation and evaluation; or for professional activities activities as such acquisition, cataloging, classification, indexing, reference work and so on. Most professional will be eligible for membership of a professional association. Sometimes staff who do not have specific qualification in librarianship or information work will ocupy posts which would normally be filled by professional librarian or information workers. These will include persons whose training has been by means of an extened period of work in a library and professional personnel who apply their knowledge of the theories, principles, and techniques of some subject speciality other than librarianship , such as languages, law and computer technology, to work within a library. Audio-visual and media specialists are also included as professional staff." (6)

While there is a great diversity among developing countries - diversity in culture, political. social, economic, and other factors - some problems and conditions stemming from similarities in development appear for many such countries. These conditions are crucial for determining what information services should be all about and therefore what is relevant for education of information professionals. There is a dilemma present in choosing between provision of support for library services (and library education) oriented toward mass education or for information services (and information science education) oriented toward development plans - particularly in relation to industrialization and modernization - and thus toward the elite.

In a reaction to a discusstion to curricular choices in information science in Mexico by Carrion, Horowitz succinctly described the problems and the choices in developing countries: (7)

> The problems of national developments... include: rapid demographic growth; the enormous gap between needs and the resources available for meeting them; widespread literacy; the lack of homogeneity; the wide difference in living standard between the urban and rural sectors; and the rising tide of urbanization and industrialzation, which brings about far reaching social changes, such as the rupture of traditional cultural patterns and the formation of large sectors of marginal, economicallly deprived populations. Among the issues confronting newly developing countries two in particular influence the evolution of our profession. One is the role that the library must play in the national education plans.... The secound determining element is the concept of national planning and the inclusion of the library and information servives as integal parts of the national development scheme... Have we determined the subject knowledge...(curriculum for library and information science)... that the professional librarians should acquire inorder to perform within our social and cultural context?

The educational system and setting obviously contribute to the level, structure, intensity, and content of educational programs in any discipline. Three district settings for information science education can be found in the developing countries: continuing education, library schools, and education abroad.

Continuing Education

Continuing education offerings-- short courses, refresher courses, workshops, instutitutes, seminars, demonstrations, symposia, tutorials-- are by far the most widespread method by

which information science has been introduced and taught in developing countries. Continuing education is the backbone of information science education in developing countries.

Both the positive and negative aspects of continuing education are well known. The most important positive asoect is that it updates the knowledge and competencies of practicing professionals about contemporary advances in the subject which otherwise they will not gain. The most negative aspect is the relative shallowness of offerings (mostly because of time constraints) and relative lack of commitment or pressure for learning by the paticipants.

As important, valuable, and necessary as it is and as many achievement as it has shown, continuing education still not and cannot ever be a substute for formal education in a subject. Continuing education can effectively bulid upon subject knowledge gained in formal edcation, but continuing education alone does not a profession build. (7)

Library Schools

The formal, academic teaching of information science in developing countries is provided almost exclusively within the framework of library schools and library curricula. Where information science is taught, it is represented mostly by one or two survey courses; there are very few programs of specialization in information science providing an array of courses in the subject. Only one or two institutions in developing countries

offer a degree in information science.

Library schools in developing countries offer a variety of degree programs:

(1) Diploma programs

(2) Bachelor's degree programs

(3) Licenciatura degree

(4) Master's degree programs

(5) Ph.D. programs

Overall, information science education is slowly being incorporated into library curricula, and some independent programs are successful. But the academic information science education in developing countries has a long way to go to meet the constantly repeated demands for qualified information professionals within their own countries.

Education Abroad

A large number of formally educated information scientists practicing in developing countries have been educated in developed countries, most notably in the U.S. and Great Britian, and to a lesser extent in other western European countries and the U.S.S.R. These educated-abroad information scientists seem to constitute a very important segment of the profession and its leadership in their respective countries. Particularly significant is that many emerging young educators in library schools have been specializing in information science while studying in the U.S. or Great Britian. This, more than anything

else will be the decisive factor in a more widespread introduction of information science into formal curricula.(7)

Information professionals in developing countries as well as others, particularly politicians and decision-makers, are aware of this trend. And they are uneasy about it. Developing is primarily seen as a means to reduce dependence and narrow the gap in living levels. The questions are asked: Will the runaway information technology in developed countries increase dependence and widen the gap? What is the effect of the evolving information age on the development of the Third World? What strategies and policies should developing countries pursue in relation to these trends for their own benefits?

In the long run, the perceptions of and answers to these larger issues will have more impact on information science education than anything else. It will serve if those concerned with information science education throughout the world to enter into the discussion of these larger issues and formulate their own perceptions and suggestions.(7)

References

1. Moore, Nick. "Developing the information workforce", Information Development. 1:1 (Jan 1985), 38- .
2. Penna, Carlos, Foskett, Dunglas and Sewell, Phillip. National Library and Information Services: a handbook for Planners. London: Butterworths, 1977.
3. Ogunsheye,F.A. "Library education and manpower planning in Africa," In National and International Library Planning: key papers presented at the 40th session of the IFLA General Council, Washington, D.C. 1974.
4. Unesco, GIP and UNISIST. Guidelines for conducting information manpower surveys. vol.I. prepared by Nick Moore. Paris: UNESCO, January 1986.
5. Spivack, Jane F. Careers in Information. Professional Librarian Series. New York: Knowledge Industry Publication, 1982.
6. UNESCO, GIP and UNISIST. Guidelines for conducting information manpower surveys. vol. II. prepared by Nick Moore. Paris: UNESCO, January 1986.
7. Saracevic, Tefko and others. "Issues in information science education in developing countries," Journal of American Society for Information Science. 36:3 (May 1985) ,192-199.

Resource Guide

This resource guide, **Diversification of Information Professionals in Developing Countries,** is aimed to be used as a reference source. Selected literatures, as the sources, cover the following areas:

- Background in economic and education in developing countries;
- The inpacts of information used in developing countries;
- Some problems, for examples; lacking of appropriate staff in information systems, technological transfer and so on;
- Guidelines for workshops, trainings and seminars in profession;
- Curriculum innovation in Library and Information Science; and
- The new roles for information professionals.

Arrangement

The sources in this resource guide are provided into three parts:

Part I: UNESCO Publications

Part II: International Conferences Papers

Part III: Researches Reviews and Articles Published in Related Periodicals

In part I, each document will be listed alphabetically under Unesco and special agencies, then titles. Part II and III documents listed by authors' name alphabetically.

UNESCO PUBLICATIONS

UNESCO, GIP and UNISIST. A model curriculum for the education and training of activities in authomation: a RAMP study. prepared by M.H. Fishbein. Paris: UNESCO, November 1985. [PGI- 85/ws/27]

The present study, prepared under contract with the International Council on Archives -ICA- is intended for those involved in planning and conducting archivial and record management training; for the individual archivists and record managers interested in professional development through continuing education programmes; and to all information professionals in learning of the extent to which education in automation has been and is being promoted as an essential part of the training of archivists and record managers.

UNESCO, General Information Programme and UNISIST. Achives and education : a RAMP study with quidelines. Prepered by Eckhard G. Frang. Paris: Unesco, 1986. [PGI-86/ws/18]

The present study, prepered under contract with the International Council on Archives, explains and documents the variety of ways in which archives can ce made an integral part of pre-university edcation. It illustrates how both teachers and students can increase their understanding and appreaciation of history by becoming familiar at first hand with the source material for the writing of history. The

study is intended for both teachers who could benefit from archvial outreach programes, and for archival administrators and archivists who are encouraged to estrablish or to futher develop programmes in this area.

UNESCO, GIP and UNISIST. Guidelines for conducting information manpower surveys. Vol.I Prepared by Nick Moore. Paris: UNESCO, January 1986.
[PGI-86/ws/3]

The aim of this guidelines is to provide the information and guidance needed for the estrablishment and operation of manpower planning system for libraries, archives and information services. They have been designed for librarians and information workers who want to ensure that the development of manpower in their country is, as much as possible, parallel with the needs and demands of the overall information systems. They have not been written with the specialist in manpower planning in mind and give rather a simple and uncomplicated approach to the task. Futhermore, they have been conceived with the need for manpower planning is particularly strong.

UNESCO, GIP and UNISIST. Guidelines for the conducting information manpower surveys. Vol II. Questionnairs and accompany document. Prepares by Nick Moore. Paris: UNESCO, January 1986.

This survey is being carries out as part of an overall study of the workforce. It is attempting to obtain statistical information about: current levels of employment in organizations; changes that have taken places in the last year; and changes that are likely to take place in the next five years.

UNESCO, GIP and UNISIST. Guidelines for curriculum development and the administration of modern archives: a RAMP study. Prepared by Michael Cook. Paris: UNESCO, 1982.
[PGI-82/ws/16]

UNESCO, UNISIST. GUidelines for curriculum development in information studies. Prepared by W.L.Saunders. Paris: UNECSO, 1978.
[PGI-78/ws/27]

The object of these guidelines is to provide help and guidance to the institutions and individuals charged with the responsibility for creating and developing information studies curricula for the preparation of documentalists, information scientists and librarians, with particular emphasis on the needs of developing countries.

UNESCO, UNISIST. Guidelines for developing and inplementing a national plan for training and education in information use. Prepared under control of UNESCO by T.D. Wilson. Paris: UNESCO, 1981.

[PGI-80/ws/28]

The aim of this guidelines is not to give the reader a ready-made statement of policy but to offer a systematic means of analysing the whole process of planning, implementation and evalation. The guidelines present a framework which can be adapted to meet local needs and circumstamces. A number of individuals, as well as the ad hoc Committee on Education and Training, Policy and Programme, have contributed to this guidelines by commenting upon an outline draft.

UNESCO, UNISIST. Guidelines for formulating policy on education, training, and development of library and information personnel. Prepared by A. Neelamaghan. Paris: UNESCO,December 1987.

[PGI-78/ws/29]

No policy guideline in a dynamic area like the information field can be considered final. The changing information environment and social needs and demands will no doubt dictate midifications in the present guidelines and the formulation of new ones. Furthermore, it is no easy to

formulate a set of guidekines applicable in all countries. But the present document may mark the start towards a more definitive statement. Here the objective is to provide general advice on major issues and factors to be considered in formulating an information manpower development policy, especially as concerns education and training of information personnel.

UNESCO, UNSIST. Guidelined for the organization of short courses and workshops on the dissemination of data in science and technology. prepared by David G. Watson. Paris: Unesco, April 1986.

[PGI-86/ws/11]

This document presents guidelines on the organization of short courses and workshop on the dissemination of data in science and technology. The guidelines have been prepared for teachers and organisers of auch courses. Four major themes are considered: curriculum design, instructional methods, planning and administration, course evaluation. An extensive bibliography of course curriculum topics is included, and it is suggested that, with appropriate updating, the complete listing or selected portions of it might usefully be made available to the students of these courses.

UNESCO. Guideline for the organisation training courses, workshops and seminars in scientific and technical information and documentation. Paris: UNESCO, April 1975.

UNESCO, GIP and UNISIST. Guideline to the production and use of audiovisual aids in library and information science teching. Prepared by Anthony H. Thompson. Paris: UNESCO, 1983.

[PGI-83/ws/17]

The aim of this guideline is to stimulate the production of audio-visual materials and to promote its use by schools of library and information science, particularly in developing countries, with a view of improving the teaching/learning process. It emphasizes the important of training teacher of library and information science in the use and preparation of audio-visual aids and contains practical indications about audi-visual equipment suitable for use in developing coúntries.

UNESCO. Planning the education and training programme for 1984-1985 against the background of past experience. prepared by S. Parker. Paris: Unesco, 1982.

UNESCO, GIP and UNISIST. South Pacific region pilot project on school library development; course for teachers on the use

of information resources and library by teachers; course for teacher trainees who wish to take school librarianship as a major in their teacher training course. Prepared by Magaret Trask and a group of experts. Paris: Unesco, 1984. [PGI-84/ws/13]

UNESCO, GIP and UNISIST. Teachers, information and school libraries. Prepared for IFLA Section on School Libraries Working Group by Noelene Hall. Paris: UNESVO, January 1986. [PGI-86/ws/17/]

The present guidelines aiming, in particular, at the teachers themselves, in the framework of both initial and continuing education. Some important points, such as the use of information sources available and the information handling capabilities required outside the school environmrnt, need to be a laborated. These will dealt with in other publications.

International Conferences Papers

Aboyade, Olabimpe. "The administrator's challenge in curriculum planning and implementation," In Curriculum Development in a Changing World; papers presented at the FID Education and Training Committee workshop, the Hague, Netherland, 17-20 September 1984. pp.9-13.

Cronin, Blaise. "Expanding horizons trends in education for library and information science," In Education in Library and Information Science; proceedings of the International Conference held at the Inter-university Centre of Postgraduate Studies in Dubrovnik, 21-26 May 1984. Informatol. Yugosl. Seperate Special No 6 (1984), 119-124.

Libraries are both one group of players on a large and rapidly expanding information stage. The growth of the information complex has created new career opportunities, new challenges and new tensions for the traditional library/information profession. Social, demographic, educational and technological change is forcasing the profession to reassess its role and activities. In the next decade the structure and character of library/information science education will have to undergo significant change if it is to respond to the needs of the new wave information workers.

Cronin, Blaise. "The structure of library and information science education in the United Kingdom," In Education in Library and Information Science; proceedings for the International Conference held at the Inter-university Centre of Postgraduate Studies in Dubrovnik, 21-26 May 1984, Informatol. Yugosl. Sep. Spec. 6 (1984), 49-53.

Dosa, Marta L. "Education for new professional roles in the information society," In Education in Library and Information Science; proceedings of the International Conference held at the Inter-university Centre of postgraduate Studies in Dubrovnik, 21-26 May 1984, Informatol. Yugosl. Sep. Sepec. 6 (1984), 99-107.

The paper discussess five areas of information work which require a new combination of knowledge, professional attitudes and skills: information resources management, information councelling, research utilization, social networking and public information dissemination. Education for these roles cannot depend on establishing models or textbooks. Students need to be involved in research projects, interdisciplinary seminars and field work at alternative sites. the paper emphasizes international perspectives and cooperation as the basis of education development.

Dosa, Marta L. "The management of innovation as an integrating theme in the curriculum for industrial information officers," papers presented at the Seminar on the Integration of External and Internal Sources of Information in the Industrial Firm. Held at Prague, Czechoslovakia, 16-17 September 1985.

Organizational everywhere have constantly been put to test by economic and social stress. Consequently, much attention has been given by researchers and policy makers to the management of creativity and intentiveness. A course, adaptable to the needs of different countries, is introduced to prepared the industrial information officers for a key role in the innovation process.

Kularatne, E.D.T. "Library education and training for sub-professionals in developing countries," In Education in Library anf Information Science; proceedings of the International Conference held at the Inter-university Centre of Postgraduate Studies in Dubrovnik, 21-26 May 1984 Informatol. Yugosl. Sep. Spec. 6 (1984), 59-64.

This paper attempts to examine the current trends in education and training of the grassroot-level librarians in some of the developing countries-mostly in Africa

Mangla, P.B. "The emerginging concept of information service in developing countries and its input on curriculum design with particular refernce to India," In Curricurum Development in a Changing World; papers presented at the FID Education and Training Committee Workshop, the Hague, Netherland, 17-20 September 1984. pp. 52-66.

Munoz, Federio Turnbull and Ascencio, Marganita Almada de. "Formation of human resources in information science: an experience of the National University of Mexico," In Curriculum Development in a Changing World; papers presented at the FID Education and Training Committee Workshop, the Hague, Netherland, 17-20 September 1984. pp. 29-39.

Rajan, T.N. "Curriculum development in the changing context of information," In Curriculum Development in a Changing World; papers presented at the FID Education and Training Committe Workshop, the Hague, Netherland, 17-20 September 1984. pp. 188-198.

Robert, Kenneth. "Contribution of Unesco in the education and training of information specialists," In Education in Library and Information Science; proceedings of the International Conference held at the Inter-university Centre of

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Postgraduste Studies in Dubrovnik, 21-26 May 1984. Informatal. Yugosl. Sep. Spec. 6 (1984), 75-84.

Breifly indicates the character of Unesco's Work in the library and information area and the nature of Unesco's General Information Programme. Describe major thrusts of the work in education and training of information specialists and users. Particular attention is given to activities of regional character or significance, notably now operating or planned for southeast Asia, Latin American and Africa.

Rugaos, Bendik. "Education for the information professionals :the international trends toward an integrated approach to the edcation of information professionals," In Education in Library and Information Science; proceedings of the International Conference held at the Inter-university Centre of Postgraduate Studies in Dubrovnik, 21-26 May 1984. Informatol. Yugosl. Sep. Spec. 6 (1984), 109-111.

This paper lists a number of points related to the idenity of the information professionals,and examines the role of international organizations like IFLA, FID, ICA and Unesco in the work of the harmonization of educational programmes for these areas. It touches upon the impact of new technology and the growing internationalization of work within these fields.

Elements like costing of information services are breifly

considered and the need for leadership develoment is underlined. The problems of professional change and adaptation are examined, and various factors affecting changes in the professional education considered.

Splichal, Slavko. "The role of information science education for scientists and the development of information activities," In Education in Library and Information Science; proceedings of the International Conference held at the Inter-university Centre of Postgraduate studies in Dubrovnik, 21-26 May 1984. Informatol. Yugosl. Sep. Spec. 6 (2984), 91-98.

This contribution suggests a curriculum model for information science education in undergraduate studies of sociolgy, political science, and journalism. The aim is to provide students with a technical knowledge as well as with an awareness of the social implications of informatization, its development as part of the evolution of science and technology ,and its dependence on the power and productive atructures of society, on its culture, and on the social functions of these processes.

Wasserman, Paul. "The teacher's challenge in curriculum planning and implication," In Curriculum Development in a Changing World; papers presented at the FID Education and Training Committee Workshop, the Hague,Netherland, 17-20 September, 1984. pp. 1-8.

Wersig, Gernot. "Information science education for the 80s", In Education in Library and Information Science; proceedings of the International Conference held at the Inter-university Centre of postgraduate Studies in Dubrovnik, 21-26 May 1984.. Infomatol. Yugosl. Sep. Spec. 6 (1984), 113-118.

Research Reviews and Articles Published in Related Periodicals

Bazin, Maurice. "The Technological Mystique and Third World Options," Journal of Development Studies. 21 (JUl 1985), 98-109.

Cveljo, K. "Information activities in selected types of US scientific and technical libraries and information centers," International Library Review. 17:4 (Oct 1985), 331-345.

The remarks in this presentation touch briefly on information activities and their management in selected industrial scientific and technical libraries in the United states. Some of their implications for any country- developed or developing.

Debout, Marion. "The library of the school of oriental languages," Unesco Journal of Information Science, Librarianship, and Archives Administration. 5:1 (Jan-March), 3-13.

Fang, Josephine Riss and Nauta, Paul, editors. International Guide to Library and Information Science Education ; a reference source for education program in the information field world-wide. IFLA Publications 32. Munchen: IFLA, 1985.

The IFLA section on Library Schools and Other Training Aspects had originated a Project "Equivlence and Reciprocity

of Qualifications" during the Brussels Congress in 1977 in response to the request for "Standards for Library Schools," which had been published in the IFLA JOURNAl in 1976, so that an international reference source could be published which used towards a greater professional mobility and international cooperation. Thus, a Working Group was establish in 1977 whose members also assumed responsibility as area coordinators to ensure world-wide coverage of the Project.

The guide is arranged by name of country in alphabetical order.

Fransman, Martin. "Conceptualising technical change in the Third World in the 1980s: an interpretive survey," Monthly Review; an Independent Socialist Magazine. 38:3 (Jul-Aug 1986), 572-652.

This article has provided an interpretive survey of many of the issues that have appeared since the latter 1970s in the area of technology in the Third eorld. Perhaps the most important point to coverage the discussion is that, while central questions remaine to be clearify factors that together shap the process of tecnical change.

Guneratne, D.P. "Data for local development; a pilot project in Sri Lanka," Information Development. 2:2 (Apr 1986),79-84.

Describes pilot project for establishment of microcomputer-based data system for village-level planning and rural development in Sri Lanka which was initiated in January 1983 to investigage problems and possibilities of impoving information management at local level. Administrative and planning structure, project scope and objectives, and implementation issues are examined.

Gill, Michael E. "The library, archive and information center network as surrogate national library," Unesco Journal of Information Science,Librarianship and Archive Administration. 5:3 (1983), 149-152.

The Public Library and several other libraries in Barbados have grown up as independent institutions and have each developed along traditional lines. In reponse to a call from government tp make proposals for, among other things, 'the designation of National Library' the National Council on Libraries, Archives and Documentation Services proposed instead the creation of a network with a central co-ordinating directorate. Funds from IDRC, Canada, are availableto mount a two-year project which will establish the directorate and permit the development of the network.

Hamlin, Donna Schenck and George, Paulette Foss. "Using special library to interface with developing country clientele," Special Libraries. 77:2 (Spring 1986), 80-89.

Hyde, Albert C. and Shafritz, Jay M. "HRIS: introduction to tomorrow's systen for management human resources," Public Personnel Management. 6:2 (Mar-Apr 1977), 70-77.

Lee, Hwa-wei. "International library internships:an effective approach to co-operative," International Library Review. 17:4 (Oct 1985), 17-25.

Co-operation for library development in the Asian and Pacific Region takes many forms. Such as deversity is necessary to address the varying needs and levels of development among and within the countries in the Region. One important area for co-operation is the education and training of library and in formation professionals. Adequate manpower resources are crucial for library development at a time when the importance of information for national development is widly acknowlegded.

Marshall, D.G. "Computer technology in Third World Education," Computer and Education. 8:4 (1984), 377-381.

Marquez, Natacha. "A co-operative network for information on higher education in Latin America and the Caribbean," Unesco Journal of Information Science, Librarianship ans Achives Administration. 5:1 (Jan_Mar 1983), 84- 92.

This article summarizes the proceedinggs of the Regional Meeting of Experts of Information in Higher Education in Latin America and Caribbean, held in Caracas from 4-8 October 1982.

Mohamed, Oli. "Education for library and information managers:challenges of the post-industrial society," International Library Review. 14:2 (April 1985), 185-197.

The objective of this article is to highlight some of the challenges facing this profession in the post-industrial society, to examine some of the current thinking with respect to the education for library and information managers, and to breifly review the Malasian situation in this context.

Moore, Nick. "Developing the information workforce," Information Development.1:1 (Jan 1985), 38-44.

Human resources are a crucial element in the development of libraries and information systems. This is particularly the case in developing countries whrer labour shortages and

accelerated growth place considerable strain on the development of workforce. Effective workforce management can alleviate some of the problems by developing forecasting and planning systems which are suffciently simple to be integrated with overall development plans.

Neelameghan, A. "International and regional cooperation in human resources development for information services in developing countries: a case study," Education for Information. 2:3 (September 1984),191-208.

The following features of the Manila project are breifly described: evolutionary background; programmes and activities; development of teaching aids and information technology transfer; characteristics of participant in the course; fellowships provision; admission requirements; faculty development programmea; project management including instutional framework, and mechanisms for feedback and monitoring.

Neelameghan, A. "Training in computer applications and online search for students of library science :a case study," Unesco Journal of Information Science, Librarianship and Archives Administration. 5:1 (Jan -Mar 1983) ,12-22.

Okafar, Francis C. "Dimension of community development projects in Bendel State, Nigeria," Public Administration and Development. 4 (1984), 249-258.

Rayne, Monica a. amd Sabaroche, Herbert F. "Personality and occupational preference: testing Holland's theory in the Caribean," International Journal for the Advancement of Councelling. 8:2 (1985), 147-156.

Saracevic, Tefko; Brago, Gilda M. ; and Afolayan, Matthew A. "Issue in information science education in developing countries," Journal of the American Society for Information Science. 36:3 (May 1985), 192-199.

This article sttempts an inventory of the major issues in information science education in developing countries. By no stretch of the imagination are the developing countries a homogeneous block ; thus, every one of the issues identified exhibits a different countries and even in different level of insity and different specific in different countries and even in different institutions within the same country.

Sharif, Nawaz M. "Measurement of technology for national development," Technological Forecasting and Social Change. 29 (April 1986), 119-171.

Tefko, Saracevic. "Training and education of information scientists in Latin America, " Unesco Journal of Information Science, Librarianship and Archives Administration. 23 (Jul-Sep 1980), 170- 179.

Wasserman, Paul. "Review of international and regional programmes in training managers for the information profession," Education Information. 2:1 (Mar 1984), 3-18.

This report plans to identify the method employed inprepareing the paper, treating breifly some problems of definition which limit the focus of the review; describe and characterize replies received from several organizations which were sent and responded to inquiry letters, and others whose work is related and known to the writer; and finally, drawn from the UNESCO programme experience, suggest a general framework and content outline which appears to fit the context for international and regional management courses.